

**Notice of Allowability**

Application No.

09/695,306

Examiner

Jacob Y Choi

Applicant(s)

UMEMOTO, SEIJI

Art Unit

2875

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/08/2004.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ The drawings filed on 07 November 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see Appeal Brief pages 5-7, filed 10/08/2004, with respect to claims 1, 5, 9, & 10 have been fully considered and are persuasive. The claim rejection under 35 USC § 103 of 04/16/2004 has been withdrawn.

### ***Allowable Subject Matter***

2. The following is an examiner's statement of reasons for allowance:

First, the claims recite a linear light source having an effective light emission region, which is longer than a longitudinal length of the incidence side surface.

Sonehara (USPN 4,870,484) does show a light source that is longer than a longitudinal length of an incidence side surface of a light pipe (Figure 9A) but fails to explicitly disclose advantage of such a structure for the particular front lighting system.

Second, the claims recite a specific detail structure of a plane light source unit comprising the light output means of the light pipe has a repetitive structure of prism-like irregularities arranged at intervals of a pitch in a range of from 50 $\mu$ m to 1 mm, each of the prism-like irregularities being constituted by a combination of a short side surface and a long side surface, the short side surface is made of a slope inclined down from the incidence the surface toward an end side opposite to the incidence side surface at an inclination angle in a range of from 30 to 45 degrees with respect to a reference

plane of the lower surface, and the long side surface is made of a slope having an inclination angle in a range of from 0-10 degrees with respect to the reference plane, so that a difference between the inclination angle is not larger than 5 degrees as a whole, the difference between the inclination angle of adjacent long side surfaces is not larger than 1 degree, and a projected area of the long side surface on the reference plane is not smaller than five times as large as that of the short side surface.

Because none of the reference disclosed the combination of a linear light source having an effective light emission region, which is longer than a longitudinal length of the incidence side surface with a detailed structure of the light pipe where a repetitive structure (50  $\mu\text{m}$  to 1.0  $\mu\text{m}$ ) of prism-like irregularities being constituted by a combination of a short side (30-45 degrees) surface and a long side (0-10 degrees) surface, nor is there any motivation to combine them, the claims deemed patentable over the prior art of record. Claims 1-12 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC

A handwritten signature in black ink, appearing to read 'T. M. Sember', followed by a long diagonal line extending upwards and to the right.

**THOMAS M. SEMBER**  
**PRIMARY EXAMINER**